

REMARKS

Applicants appreciate the Office's review of the present application. In response to the Office Action, the cited references have been reviewed, and the rejections and objections made to the claims by the Examiner have been considered.

In order to render the claims more clear and definite, and to emphasize the patentable novelty thereof, claims 1-2, 5-6, 11, and 27 have been amended, and claims 3-4 have been canceled without prejudice. Support for any claim amendments is found in the specification, claims, and drawings as originally filed, and no new matter has been added. Accordingly, all claims presently on file in the subject application are in condition for immediate allowance.

Reconsideration of the application in light of the above amendments and the following remarks is respectfully requested.

Rejections

No Basis or Rationale provided for the rejection of Claim 9

In the Office Action Summary, claim 9 is indicated as rejected.

However, no basis or rationale for the rejection of claim 9 is included in the Detailed Action. Since the basis and rationale for the rejection of claim 9 is not specified, Applicants have little or no opportunity to respond to the rejection.

In the absence of conditions such as misjoinder or fundamental defects in the application (conditions which do not exist here), 37 C.F.R. §1.104(b) requires that the "examiner's action will be complete as to all matters". Because there is no statement of the statutory basis for the rejection, and no rationale or explanation provided to support the rejection, Applicants believe that the rejection is deficient on its face, and therefore that the Office Action is incomplete. Accordingly, Applicants respectfully request clarification of the rejections with respect to the statutory basis, specific references, and specific references teachings therein pursuant to 37 CFR

§1.104(c)(2) in a subsequent non-final Office Action if any of the claims are not found to be allowable.

Rejection Under 35USC §101

Claims 1-2, 5-8, 11, 13-15, and 17-20 have been rejected under 35 USC §101 as directed to non-statutory subject matter for failing to produce a tangible result. In addition, claims 12 and 21-25 have been rejected for being dependent upon claims rejected under 35 USC §101. In view of this rejection, independent claims 1 and 11 have been amended.

Independent claim 1 recites:

“1. (Currently amended) A method for identifying a fluid ejection device comprising:
determining first identification information;
based upon the first identification information, querying one or more elements on a fluid ejection device that include second identification information, wherein the fluid ejection device is a print head and the first identification information comprises a data rate of operation of the print head;
determining the second identification information based upon the query;
determining a plurality of operating parameters of the fluid ejection device based upon the first and second identification information; and
operating the fluid ejection device in accordance with at least some of the operating parameters.” (emphasis added)

Independent claim 11 recites:

“11. (Currently amended) A method of identification of a fluid ejection device, comprising:
providing at least a first signal on one or more lines, the one or more lines coupled to one or more fluid ejection elements that eject fluid;
determining, responsive to the at least first signal, first identification information;
providing at least a second signal to one or more elements on the fluid ejection device that are configured to provide second identification information;
determining the second identification information responsive to at least the second signal;
and
determining a plurality of operating parameters of the fluid ejection device based upon the first and second identification information, wherein the fluid ejection device is a print head and the first identification information comprises a protocol for ejecting ink from the print head

and a value of at least one pull down resistor; and
operating the print head in accordance with at least some of the operating parameters so as to eject the fluid.” (emphasis added)

As to non-statutory subject matter, 35 USC §101 requires that “The claimed invention as a whole must accomplish a practical application”, which includes a “tangible result” (MPEP 2106).

Claim 1, as amended, recites the practical application and tangible result of “operating the fluid ejection device in accordance with at least some of the operating parameters”. Therefore, Applicants believe that claim 1, as amended, recites a statutory process claim.

Claim 11, as amended, recites the practical application and tangible result of “operating the print head in accordance with at least some of the operating parameters so as to eject the fluid”. Therefore, Applicants believe that claim 11, as amended, recites a statutory process claim.

It is further noted that, to any extent that claims 1 and 11 may have been considered by the Office to be computer-related processes, the operating step in each claim results in a physical transformation outside any computer, and thus would provide a safe harbor with regard to such a rejection.

Independent claim 17 recites:

“17. (Previously presented) A fluid ejection device, comprising:
a plurality of fluid ejection elements;
a plurality of identification elements;
a plurality of lines each coupled to a group of the plurality of fluid ejection elements; and
a plurality of pull down resistors coupled to some of the plurality of lines, at least some of the plurality of pull-down resistors encoding information regarding a protocol for operating the plurality of fluid ejection elements, wherein the information regarding the protocol further comprises information that is indicative of parameters for providing signals to the identification elements.” (emphasis added)

Applicants respectfully believe that claim 17 recites a statutory machine. As to whether subject matter is statutory or non-statutory subject matter, “If a claim defines a useful machine or

manufacture by identifying the physical structure of the machine or manufacture in terms of its hardware or hardware and software combination, it defines a statutory product. See, e.g., *Lowry*, 32 F.3d at 1583, 32 USPQ2d at 1034-35; *Warmerdam*, 33 F.3d at 1361-62, 31 USPQ2d at 1760.” (MPEP 2106). “A claim limited to a machine or manufacture, which has a practical application in the technological arts, is statutory. In most cases, a claim to a specific machine or manufacture will have a practical application in the technological arts. See *Alappat*, 33 F.3d at 1544, 31 USPQ2d at 1557” (MPEP 2106)

Here, apparatus claim 17 recites the physical structure of the machine, a fluid ejection device, in terms of its hardware: fluid ejection elements, identification elements, lines, and pull down resistors. In addition, the machine of claim 17 has a practical application in the technological arts: the ejection of fluid from the device.

MPEP 2106 further states that most claims to a specific machine are statutory. As such, Applicants expect a rejection under 35 USC §101 of a specific machine to include a detailed explanation as to why the claims the Office considers the claim to be non-statutory. In rejecting claim 17, however, the Office merely points to the recited claim language of “providing signals to the identification elements” as causing the claim to fail to produce a tangible result. Applicants do not understand how such claim language, which is not a method step but rather describes a characteristic of the recited parameters (“parameters for providing signals to the identification elements”), could negate the recited physical structure and evident practical application in the technological arts recited in claim 17, and render the recited machine non-statutory. If the rejection of claim 17 is maintained, Applicants respectfully request a more detailed and descriptive explanation so that Applicants can respond in such a manner to resolve the rejection.

Applicants further note that this same language of “providing signals to the identification elements” appears also in independent apparatus claim 27, which has not been rejected under 35 USC §101.

For the reasons stated above, it is believed that claim 17 recites statutory subject matter.

Dependent claims 2, 5-8, 12-15, and 18-25 all depend, directly or indirectly, on one of claims 1, 11, or 17, and thus for similar reasons stated above these dependent claims also recite statutory subject matter.

In view of the foregoing, it is submitted that the rejections under 35 USC §101 of claims 1, 5-8, 11-15, and 17-25 have been overcome and should be withdrawn.

Rejection Under 35USC §112 First Paragraph

Claim 27 has been rejected under 35 USC §112, first paragraph, for reciting a single means claim that is subject to an undue breadth rejection. In response, claim 27 has been amended to eliminate the means clause. As such, claim 27 is no longer a single means claim, as described in MPEP §2164.08(a), and Applicants respectfully request that the rejection be withdrawn.

Claims 29-32 have been rejected under 35 USC §112, first paragraph, as dependent upon claim 27. Since claim 27 is now believed allowable in independent form, claims 29-32 are similarly believed allowable in dependent form.

Formalities

Claim Objections

Claims 3-4 have been objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. In response, claim 3-4 have been canceled.

Claim 27 has been objected to for insufficient antecedent basis for the limitation “the means for encoding”. In response, claim 27 has been amended to eliminate this limitation.

Claim 27 has been objected to for grammatical structure issues. In response, claim 27 has

been amended to recite “wherein the encoder changes” so as to eliminate the grammatical structure issues.

It is therefore believed that these amendments resolve the objections.

Conclusion

Attorney for Applicants has reviewed each one of the cited references made of record and not relied upon, and believes that the claims presently on file in the subject application patentably distinguish thereover, either taken alone or in combination with one another.

Therefore, all claims presently on file in the subject application are in condition for immediate allowance, and such action is respectfully requested. If it is felt for any reason that direct communication with Applicant's attorney would serve to advance prosecution of this case to finality, the Examiner is invited to call the undersigned Robert C. Sismilich, Esq. at the below-listed telephone number.

**AUTHORIZATION TO PAY AND PETITION
FOR THE ACCEPTANCE OF ANY NECESSARY FEES**

If any charges or fees must be paid in connection with the foregoing communication (including but not limited to the payment of an extension fee or issue fees), or if any overpayment is to be refunded in connection with the above-identified application, any such charges or fees, or any such overpayment, may be respectively paid out of, or into, the Deposit Account No. 08-2025 of Hewlett-Packard Company. If any such payment also requires Petition or Extension Request, please construe this authorization to pay as the necessary Petition or Request which is required to accompany the payment.

Respectfully submitted,



Robert C. Sismilich

Reg. No. 41,314

Attorney for Applicant(s)

Telephone: (858) 547-9803

Date: 11/10/06

Hewlett-Packard Company
Intellectual Property Administration
P. O. Box 272400
Fort Collins, CO 80527-2400